RECEIVED JULY 30, 2008

0079387

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FLUOR

Memorandum

M4W41-SLF-08-763

To: H. Hampt E6-35 Date: July 30, 2008

From: S. L. Fitzgerald, Manager
WSCF Analytical Lab

cc: w/Attachments

T. F. Dale	S3-30	J. E. Trechter	S3-30
A. J. Kopriva	S3-30	S. J. Trent	E6-35
H. K. Meznarich	S3-30	File/LB	
P. D. Mix	S3-30		

Subject: FINAL RESULTS FOR SAMPLE DELIVERY GROUP WSCF20081149 – SAF NUMBER F08-096

Reference:
(1) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEM-001, October 31, 2002

(2) HNF-SD-CD-QAPP-017, Rev. 9, Waste Sampling & Characterization Facility Quality Assurance Plan

This letter contains the following information for sample delivery group WSCF20081149:

- Cover Sheet (Attachment 1)
- Narrative (Attachment 2)
- Analytical Results (Attachment 3)
- Sample Receipt Information (Attachment 4)
- New GRP Specifics for SDG# 20081149 (Attachment 5)
- Sample Record Sheet (Attachment 6)

SLF/grf

Attachments 6

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ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#: WSCF20081149
Data Deliverable Date: 17-jul-2008
Data Deliverable: Cover Sheet

SAF#	Sample ID	WSCF#	Matrix
F08-096	B1W0W2	W08GR01505	SOIL
	B1W0W4	W08GR01501	SOIL

M4W41-SLF-08-763

ATTACHMENT 2

NARRATIVE

Consisting of 4 pages
Including cover page

Introduction

Three S&GRP samples were received at the WSCF Laboratory on June 5, 2008. Two of the three samples were analyzed at the WSCF Laboratory. Summary of sample disposition is offered below:

- B1RPK2, B1RPK4, B1RPL0, B1RPL2, B1RPN4, and B1RPN6 – Samples were successfully analyzed at the WSCF Laboratory for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter;

- B1RPL1, B1RPN5, and B1RPK3 – Analyses of these Methanol Blank samples and their associated high concentration VOA samples were not required.

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4.

It should be noted that the attached chain of custody was stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving, indicating the presence of ice in the sample container. Please note that Attachment 5 also includes an email sent to the Sample Custodians addressing login made by Steve Trent concerning login changes to the chain of custody forms. Additionally, copies of the sample record sheets are included as Attachment 6.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report,* pages 13 through 15, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – The hold time requirement for this analysis was met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See page 17 for QC details.

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1VHL8 (SDG# 20081141, SAF# F08-093).

- The RPD value for sulfate in the duplicate sample did not meet the laboratory requirement. Since all of the other QC controls are within the established limits, the data were accepted.

ICP-MS Metals – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 18 through 20 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V2W1 (SDG# 20081131, SAF# F08-101).
- The percent recovery in the LCS for copper, cadmium, and nickel was slightly below the laboratory requirement; therefore, the sample result for copper and nickel was "E" flagged. Cadmium was not "E" flagged since the sample result was below the MDL.

All other QC controls are within the established limits.

Organic Comments – All organic results have been moisture corrected and are reported on a dry weight basis.

PCB – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 26 through 27 for QC details.

All QC controls are within the established limits.

Semi-VOA – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GPP Letter of Instruction. See pages 28 through 31 for QC details. Analytical Notes(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V9L3 (SDG# 20081183, SAF# F08-045).

All QC controls are within the established limits.

TPHD-WA – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See page 25 for QC details.

All QC controls are within the established limits.

VOA – The hold time requirement for this analysis was met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample, were analyzed with this delivery group per the GRP Letter of Instruction. See pages 32 through 34 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1V2V9 (SDG# 20081131, SAF# F08-101).

All QC controls are within the established limits.

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike *(Matrix Spikes apply only to Neptunium, Technetium & Tritium and Matrix Spike Duplicate applies to Neptunium),* Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 38 through 42 for QC details. Analytical Note(s):

- Gamma Energy Analysis: Duplicate was analyzed on sample# B1VHL8, (SDG#20081141, SAF# F08-093).
- Plutonium Isotopic Analysis: Duplicate was analyzed on sample# B1W1C9, (SDG#20081141, SAF# F08-093).
- Uranium Isotopic Analysis: Duplicate was analyzed on sample# B1W1C9, (SDG#20081141, SAF# F08-093).
- Strontium 89/90 Analysis: Duplicate was analyzed on sample# B1VHL8, (SDG#20081141, SAF# F08-093).

Except as noted, all QC controls are within the established limits.

I certify that this data package is in compliance with the LOI, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager and Client Services as verified by the following signatures.

Scot L. Fitzgerald
WSCF Analytical Laboratory Manager

Andrew Kopriva
WSCF Client Services

M4W41-SLF-08-763

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 36 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT

for

Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: S. Fitzgerald 7/30/08

Client Services: A. Koprivra 7/30/08

All results are reported on an "as received" basis unless otherwise noted in the comment section.

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Contract#: FH-EIS-2003-MEM-001
Report#: WSCF20081149
Report Date: 30-jul-2008
Report WGPP/ver. 5.2
Groundwater Remediation Program

w13qlog v4.2 30-jul-2008 07:39:33

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20081149

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W08GR01501	Percent Solids
36818	1	37240	41580	BLANK		ICP-200.8 MS All possible meta
36818	2	37240	41580	LCS		ICP-200.8 MS All possible meta
36818	4	37240	41580	MS	W08GR01485	ICP-200.8 MS All possible meta
36818	5	37240	41580	MSD	W08GR01485	ICP-200.8 MS All possible meta
36818	5	37240	41580	SPK-RPD	W08GR01485	ICP-200.8 MS All possible meta
36818	11	37240	41580	SAMPLE	W08GR01501	ICP-200.8 MS All possible meta
36866	2	37286	41627	BLANK		Anions by Ion Chromatography
36866	16	37286	41627	BLANK		Anions by Ion Chromatography
36866	3	37286	41627	LCS		Anions by Ion Chromatography
36866	5	37286	41627	DUP	W08GR01494	Anions by Ion Chromatography
36866	6	37286	41627	MS	W08GR01494	Anions by Ion Chromatography
36866	7	37286	41627	MSD	W08GR01494	Anions by Ion Chromatography
36866	7	37286	41627	SPK-RPD	W08GR01494	Anions by Ion Chromatography
36866	12	37286	41627	SAMPLE	W08GR01501	Anions by Ion Chromatography

w13qlog v4.2 30-jul-2008 07:39:33

Department: Organic

W13q Worklist/Batch/QC Report for Group# WSCF20081149

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
			41503	BLANK		SW-846 8270C Semi-Vols
			41503	LCS		SW-846 8270C Semi-Vols
			41503	SAMPLE	W08GR01501	SW-846 8270C Semi-Vols
			41503	SURR	W08GR01501	SW-846 8270C Semi-Vols
			41503	MS	W08GR01666	SW-846 8270C Semi-Vols
			41503	MSD	W08GR01666	SW-846 8270C Semi-Vols
			41503	SPK-RPD	W08GR01666	SW-846 8270C Semi-Vols
			41778	BLANK		NWTPH-D TPH Diesel Range (Wa)
			41778	LCS		NWTPH-D TPH Diesel Range (Wa)
			41778	MS	W08GR01501	NWTPH-D TPH Diesel Range (Wa)
			41778	MSD	W08GR01501	NWTPH-D TPH Diesel Range (Wa)
			41778	SAMPLE	W08GR01501	NWTPH-D TPH Diesel Range (Wa)
			41778	SPK-RPD	W08GR01501	NWTPH-D TPH Diesel Range (Wa)
			41778	SURR	W08GR01501	NWTPH-D TPH Diesel Range (Wa)
			41854	BLANK		VOA Ground Water Protection
			41854	LCS		VOA Ground Water Protection
			41854	MS	W08GR01488	VOA Ground Water Protection
			41854	MSD	W08GR01488	VOA Ground Water Protection
			41854	SPK-RPD	W08GR01488	VOA Ground Water Protection
			41854	SAMPLE	W08GR01505	VOA Ground Water Protection
			41854	SURR	W08GR01505	VOA Ground Water Protection
			41857	BLANK		PCBs complete list
			41857	LCS		PCBs complete list
			41857	MS	W08GR01501	PCBs complete list
			41857	MSD	W08GR01501	PCBs complete list
			41857	SAMPLE	W08GR01501	PCBs complete list
			41857	SPK-RPD	W08GR01501	PCBs complete list
			41857	SURR	W08GR01501	PCBs complete list

w13qlog v4.2 30-jul-2008 07:39:33

Department: Radiochemistry

W13q Worklist/Batch/QC Report for Group# WSCF20081149

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
36700	1	37117	41478	BLANK		Gross Alpha/Gross Beta (AB32)
36700	2	37117	41478	LCS		Gross Alpha/Gross Beta (AB32)
36700	3	37117	41478	DUP	W08GR01501	Gross Alpha/Gross Beta (AB32)
36700	4	37117	41478	SAMPLE	W08GR01501	Gross Alpha/Gross Beta (AB32)
36750	1	37167	41592	BLANK		Strontium 89/90
36750	2	37167	41592	LCS		Strontium 89/90
36750	3	37167	41592	DUP	W08GR01494	Strontium 89/90
36750	14	37167	41592	SAMPLE	W08GR01501	Strontium 89/90
36750	15	37167	41592	SURR	W08GR01501	Strontium 89/90
36687	1	37104	41624	BLANK		Gamma Energy Analysis-grd H2O
36687	2	37104	41624	LCS		Gamma Energy Analysis-grd H2O
36687	3	37104	41624	DUP	W08GR01494	Gamma Energy Analysis-grd H2O
36687	9	37104	41624	SAMPLE	W08GR01501	Gamma Energy Analysis-grd H2O
37186	1	37611	41967	BLANK		Uranium Isotopics by AEA
37186	2	37611	41967	LCS		Uranium Isotopics by AEA
37186	3	37611	41967	DUP	W08GR01497	Uranium Isotopics by AEA
37186	4	37611	41967	SAMPLE	W08GR01501	Uranium Isotopics by AEA
37186	5	37611	41967	SURR	W08GR01501	Uranium Isotopics by AEA
37187	1	37612	41969	BLANK		Plutonium Isotopics by AEA
37187	2	37612	41969	LCS		Plutonium Isotopics by AEA
37187	3	37612	41969	DUP	W08GR01497	Plutonium Isotopics by AEA
37187	4	37612	41969	SAMPLE	W08GR01501	Plutonium Isotopics by AEA
37187	5	37612	41969	SURR	W08GR01501	Plutonium Isotopics by AEA

WSCF
METHOD REFERENCES REPORT

Department: Inorganic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-505-412 LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY

EPA-600/R-94-111 200.8	DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLAS
HEIS 200.8_METALS_ICPMS	Inductively Coupled Plasma - Mass Spectrometry
HEIS RADISOTOPES_ICPMS	Radioisotopes by ICP/MS

LA-519-412 LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C

EPA-600/4-79-020 160.1	Resisual, Filterable
EPA-600/4-79-020 160.3	RESIDUE, TOTAL
HEIS 160.1_TDS	Residual, Filterable
Standard Methods 2540B	Total Solids Dried at 103-105 C

LA-533-410 LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY

EPA-600/R-94-111 300.0	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY
HEIS 300.0_ANIONS_IC	Determination of Inorganic Anions by Ion Chromatography

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at http://www2.rl.gov/phmc/as-dol.

WSCF
METHOD REFERENCES REPORT

Department: Organic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-523-427	LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY	
	EPA SW-846 3510C	SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION
	EPA SW-846 3545	PRESSURIZED FLUID EXTRACTION (PFE)
	EPA SW-846 3665A	SULFURIC ACID/PERMANGANATE CLEANUP
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8082A	POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY
	HEIS 8082_PCB_GC	Polychlorinated Biphenyls (PCBs) by Gas Chromatography
LA-523-455	LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846	
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8260B	VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
	HEIS 8260_VOA_GCMS	Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
LA-523-456	LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C	
	EPA SW-846 8000B	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS
	EPA SW-846 8270C	SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS)
	HEIS 8270_SVOA_GCMS	Semivolatile Orgamoc Compounds By Gas Chromatography/Mass Spectrometry (GC/MS)
LA-523-493	NWTPH-Diesel and/or Gasoline	
	HEIS WTPH_DIESEL (HEIS)	Total Petroleum Hydrocarbons in Diesel
	WDOE TPHD	Total Petroleum Hydrocarbons in Diesel

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at http://www2.rl.gov/phmc/as-dol.

WSCF
METHOD REFERENCES REPORT

Department: Radiochemistry

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-508-415 LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS

HEIS	**ALPHA_GPC**	GROSS ALPHA GPC
HEIS	**BETA_GPC**	GROSS BETA GPC
HEIS	**SRTOT_SEP_PRECIP_GPC**	Strontium 89/90

LA-508-471 LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP

HEIS	**PUISO_IE_PRECIP_AEA**	Plutonium by Alpha Energy Analysis
HEIS	**RAISO_AEA**	Radium-226

LA-508-481 LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE

HEIS	**GAMMA_GS**	Gamma Emmision Spectrometry

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at http://www2.rl.gov/phmc/as-dol.

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-096
Sample # W08GR01501
Client ID: B1W0W4 GPP TRENT WSCF **Matrix:** SOIL

Group #: WSCF20081149
Department: Inorganic
Sampled: 06/05/08
Received: 06/05/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography Prep											**06/26/08**
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	< 0.294	mg/kg			49.00	0.29		06/26/08
Nitrogen in Nitrate	NO3-N	LA-533-410	BD	0.418	mg/kg			49.00	0.24		06/26/08
Sulfate	14808-79-8	LA-533-410	BD	4.43	mg/kg			49.00	3.4		06/26/08
ICP-200.8 MS All possible meta Prep											**06/24/08**
ICP-200.8 MS All possible meta											
Nickel	7440-02-0	LA-505-412	E	9.24	mg/kg			0.87	0.175		06/24/08
Silver	7440-22-4	LA-505-412	U	< 0.0873	mg/kg			0.87	0.0873		06/24/08
Barium	7440-39-3	LA-505-412		31.5	mg/kg			0.87	0.175		06/24/08
Beryllium	7440-41-7	LA-505-412		0.0600	mg/kg			0.87	0.0437		06/24/08
Cadmium	7440-43-9	LA-505-412	U	< 0.0873	mg/kg			0.87	0.0873		06/24/08
Chromium	7440-47-3	LA-505-412		7.44	mg/kg			0.87	0.437		06/24/08
Copper	7440-50-8	LA-505-412	E	5.70	mg/kg			0.87	0.0873		06/24/08
Vanadium	7440-62-2	LA-505-412		16.4	mg/kg			0.87	0.175		06/24/08
Zinc	7440-66-6	LA-505-412		16.2	mg/kg			0.87	0.698		06/24/08
Lead	7439-92-1	LA-505-412		1.38	mg/kg			0.87	0.0873		06/24/08
Mercury	7439-97-6	LA-505-412	U	< 0.0437	mg/kg			0.87	0.0437		06/24/08
Uranium	7440-61-1	LA-505-412		0.150	mg/kg			0.87	0.0437		06/24/08
Arsenic	7440-38-2	LA-505-412		0.470	mg/kg			0.87	0.349		06/24/08
Selenium	7782-49-2	LA-505-412	U	< 0.262	mg/kg			0.87	0.262		06/24/08
Total solids											
Total solids	TS	LA-519-412		96.3	Percent			1.00	0.0		06/16/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The Analyte detected in both the BLANK and the SAMPLE.(org)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

B - The analyte < the RDL but >= the IDL/MDL (inorg)
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081149
Matrix: SOLID
Test: Anions by Ion Chromatography

Sample Date: 06/04/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01494											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Fluoride	16984-48-8	<0.3		RPD			n/a	20.000	U	06/26/08
DUP	Nitrogen in Nitrate	NO3-N	4.7183		RPD			3.605	20.000		06/26/08
DUP	Sulfate	14808-79-8	6.5579		RPD			24.518	20.000 *		06/26/08
MS	Fluoride	16984-48-8	0.465678	93.510	% Recov	80.000	120.000				06/26/08
MS	Nitrogen in Nitrate	NO3-N	0.439819	97.738	% Recov	80.000	120.000				06/26/08
MS	Sulfate	14808-79-8	1.859282	93.903	% Recov	80.000	120.000				06/26/08
MSD	Fluoride	16984-48-8	0.471927	94.764	% Recov	80.000	120.000				06/26/08
MSD	Nitrogen in Nitrate	NO3-N	0.450076	100.017	% Recov	80.000	120.000				06/26/08
MSD	Sulfate	14808-79-8	1.8403	92.944	% Recov	80.000	120.000				06/26/08
SPK-RPD	Fluoride	16984-48-8	94.764		RPD			1.332	20.000		06/26/08
SPK-RPD	Nitrogen in Nitrate	NO3-N	100.017		RPD			2.305	20.000		06/26/08
SPK-RPD	Sulfate	14808-79-8	92.944		RPD			1.027	20.000		06/26/08
BATCH QC											
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	06/26/08
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030			U	06/26/08
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	06/26/08
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040			U	06/26/08
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	06/26/08
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200			U	06/26/08
LCS	Fluoride	16984-48-8	106.5609	106.989	% Recov	80.000	120.000				06/26/08
LCS	Nitrogen in Nitrate	NO3-N	92.3836	102.535	% Recov	80.000	120.000				06/26/08
LCS	Sulfate	14808-79-8	388.8504	98.195	% Recov	80.000	120.000				06/26/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081149
Matrix: SOLID
Test: ICP-200.8 MS All possible meta

Sample Date: 06/02/08
Receive Date:06/04/08

Lab ID: W08GR01485
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	Silver	7440-22-4	185.5	92.750	% Recov	70.000	130.000				06/24/08
MS	Arsenic	7440-38-2	182.7	91.350	% Recov	70.000	130.000				06/24/08
MS	Barium	7440-39-3	205.06	102.530	% Recov	70.000	130.000				06/24/08
MS	Beryllium	7440-41-7	183.81	91.905	% Recov	70.000	130.000				06/24/08
MS	Cadmium	7440-43-9	181.5	90.750	% Recov	70.000	130.000				06/24/08
MS	Chromium	7440-47-3	174.06	87.030	% Recov	70.000	130.000				06/24/08
MS	Copper	7440-50-8	171.38	85.690	% Recov	70.000	130.000				06/24/08
MS	Mercury	7439-97-6	2.01	100.500	% Recov	70.000	130.000				06/24/08
MS	Nickel	7440-02-0	172.94	86.470	% Recov	70.000	130.000				06/24/08
MS	Lead	7439-92-1	190.89	95.445	% Recov	70.000	130.000				06/24/08
MS	Selenium	7782-49-2	183.9	91.950	% Recov	70.000	130.000				06/24/08
MS	Uranium	7440-61-1	187.89	93.945	% Recov	70.000	130.000				06/24/08
MS	Vanadium	7440-62-2	159.12	79.560	% Recov	70.000	130.000				06/24/08
MS	Zinc	7440-66-6	185.2	92.600	% Recov	70.000	130.000				06/24/08
MSD	Silver	7440-22-4	185.8	92.900	% Recov	70.000	130.000				06/24/08
MSD	Arsenic	7440-38-2	182.7	91.350	% Recov	70.000	130.000				06/24/08
MSD	Barium	7440-39-3	200.06	100.030	% Recov	70.000	130.000				06/24/08
MSD	Beryllium	7440-41-7	185.71	92.855	% Recov	70.000	130.000				06/24/08
MSD	Cadmium	7440-43-9	182.3	91.150	% Recov	70.000	130.000				06/24/08
MSD	Chromium	7440-47-3	170.96	85.480	% Recov	70.000	130.000				06/24/08
MSD	Copper	7440-50-8	163.88	81.940	% Recov	70.000	130.000				06/24/08
MSD	Mercury	7439-97-6	2.06	103.000	% Recov	70.000	130.000				06/24/08
MSD	Nickel	7440-02-0	169.34	84.670	% Recov	70.000	130.000				06/24/08
MSD	Lead	7439-92-1	193.09	96.545	% Recov	70.000	130.000				06/24/08
MSD	Selenium	7782-49-2	184	92.000	% Recov	70.000	130.000				06/24/08
MSD	Uranium	7440-61-1	189.79	94.895	% Recov	70.000	130.000				06/24/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20081149
Matrix: SOLID
Test: ICP-200.8 MS All possible meta

Sample Date: 06/02/08
Receive Date:06/04/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MSD	Vanadium	7440-62-2	156.72	78.360	% Recov	70.000	130.000				06/24/08
MSD	Zinc	7440-66-6	174	87.000	% Recov	70.000	130.000				06/24/08
SPK-RPD	Silver	7440-22-4	92.900		RPD			0.162	20.000		06/24/08
SPK-RPD	Arsenic	7440-38-2	91.350		RPD			0.000	20.000		06/24/08
SPK-RPD	Barium	7440-39-3	100.030		RPD			2.468	20.000		06/24/08
SPK-RPD	Beryllium	7440-41-7	92.855		RPD			1.028	20.000		06/24/08
SPK-RPD	Cadmium	7440-43-9	91.150		RPD			0.440	20.000		06/24/08
SPK-RPD	Chromium	7440-47-3	85.480		RPD			1.797	20.000		06/24/08
SPK-RPD	Copper	7440-50-8	81.940		RPD			4.474	20.000		06/24/08
SPK-RPD	Mercury	7439-97-6	103.000		RPD			2.457	20.000		06/24/08
SPK-RPD	Nickel	7440-02-0	84.670		RPD			2.104	20.000		06/24/08
SPK-RPD	Lead	7439-92-1	96.545		RPD			1.146	20.000		06/24/08
SPK-RPD	Selenium	7782-49-2	92.000		RPD			0.054	20.000		06/24/08
SPK-RPD	Uranium	7440-61-1	94.895		RPD			1.006	20.000		06/24/08
SPK-RPD	Vanadium	7440-62-2	78.360		RPD			1.520	20.000		06/24/08
SPK-RPD	Zinc	7440-66-6	87.000		RPD			6.236	20.000		06/24/08

BATCH QC

BLANK	Silver	7440-22-4	<0.1	n/a	ug/L					U	06/24/08
BLANK	Arsenic	7440-38-2	<0.4	n/a	ug/L					U	06/24/08
BLANK	Barium	7440-39-3	<0.2	n/a	ug/L					U	06/24/08
BLANK	Beryllium	7440-41-7	<5e-2	n/a	ug/L					U	06/24/08
BLANK	Cadmium	7440-43-9	<0.1	n/a	ug/L					U	06/24/08
BLANK	Chromium	7440-47-3	<0.5	n/a	ug/L					U	06/24/08
BLANK	Copper	7440-50-8	<0.1	n/a	ug/L					U	06/24/08
BLANK	Mercury	7439-97-6	<5e-2	n/a	ug/L					U	06/24/08
BLANK	Nickel	7440-02-0	<0.2	n/a	ug/L					U	06/24/08
BLANK	Lead	7439-92-1	<0.1	n/a	ug/L					U	06/24/08
BLANK	Selenium	7782-49-2	<0.3	n/a	ug/L					U	06/24/08
BLANK	Uranium	7440-61-1	<5e-2	n/a	ug/L					U	06/24/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Inorganic**

SDG Number: WSCF20081149
Matrix: SOLID
Test: ICP-200.8 MS All possible meta

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Vanadium	7440-62-2	<0.2	n/a	ug/L					U	06/24/08
BLANK	Zinc	7440-66-6	<0.8	n/a	ug/L					U	06/24/08
LCS	Silver	7440-22-4	102	100.990	% Recov	98.000	134.000				06/24/08
LCS	Arsenic	7440-38-2	128.4	97.273	% Recov	75.000	134.000				06/24/08
LCS	Barium	7440-39-3	311.7	97.712	% Recov	87.000	121.000				06/24/08
LCS	Beryllium	7440-41-7	85.37	95.385	% Recov	70.000	153.000				06/24/08
LCS	Cadmium	7440-43-9	62.59	94.120	% Recov	95.000	124.000			*	06/24/08
LCS	Chromium	7440-47-3	62.54	85.789	% Recov	77.000	125.000				06/24/08
LCS	Copper	7440-50-8	57.27	83.606	% Recov	84.000	122.000			*	06/24/08
LCS	Mercury	7439-97-6	7.32	88.406	% Recov	71.000	132.000				06/24/08
LCS	Nickel	7440-02-0	49.87	89.694	% Recov	90.000	121.000			*	06/24/08
LCS	Lead	7439-92-1	124.8	96.000	% Recov	92.000	123.000				06/24/08
LCS	Selenium	7782-49-2	161.1	100.062	% Recov	52.000	157.000				06/24/08
LCS	Uranium	7440-61-1	365	91.250	% Recov	81.000	125.000				06/24/08
LCS	Vanadium	7440-62-2	71.32	85.928	% Recov	81.000	122.000				06/24/08
LCS	Zinc	7440-66-6	161.7	91.356	% Recov	85.000	130.000				06/24/08

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-096

Group #: WSCF20081149
Department: Inorganic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		Organics: All results are moisture corrected and reported on a dry weight basis. cgc ICP-MS: Copper LCS 84% of actual. Cadmium LCS 94% of actual. Nickel 90% of actual. All are below the laboratory statical on copper and nickel. Cadmium result below the MDL

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample
VALTEST - Test Validation
LOGTEST - Login for Tests
TESTDATA - Test Data Entry

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-096
Sample # W08GR01501
Client ID: B1W0W4 GPP WSCF TRENT **Matrix:** SOIL

Group #: WSCF20081149
Department: Organic
Sampled: 06/05/08
Received: 06/05/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
NWTPH-D TPH Diesel Range (Wa) Prep											**06/16/08**
NWTPH-D TPH Diesel Range (Wa)											
Total Pet. Hydrocarbons Diesel	TPHDIESEL	LA-523-493	U	< 3.10e+03	ug/kg			1.00	3.1e+03		07/08/08
Kerosene	TPHKEROSENE	LA-523-493	U	< 3.10e+03	ug/kg			1.00	3.1e+03		07/08/08
PCBs complete list Prep											**06/16/08**
PCBs complete list											
Aroclor-1016	12674-11-2	LA-523-427	U	< 10.0	ug/kg			1.00	10		07/09/08
Aroclor-1221	11104-28-2	LA-523-427	U	< 21.0	ug/kg			1.00	21		07/09/08
Aroclor-1232	11141-16-5	LA-523-427	U	< 10.0	ug/kg			1.00	10		07/09/08
Aroclor-1242	53469-21-9	LA-523-427	U	< 10.0	ug/kg			1.00	10		07/09/08
Aroclor-1248	12672-29-6	LA-523-427	U	< 10.0	ug/kg			1.00	10		07/09/08
Aroclor-1254	11097-69-1	LA-523-427	U	< 10.0	ug/kg			1.00	10		07/09/08
Aroclor-1260	11096-82-5	LA-523-427	U	< 10.0	ug/kg			1.00	10		07/09/08
Aroclor-1262	37324-23-5	LA-523-427	U	< 10.0	ug/kg			1.00	10		07/09/08
Aroclor-1268	11100-14-4	LA-523-427	U	< 10.0	ug/kg			1.00	10		07/09/08
SW-846 8270C Semi-Vols Prep											**06/16/08**
SW-846 8270C Semi-Vols											
4-Nitrophenol	100-02-7	LA-523-456	U	< 210	ug/kg			1.00	2.1e+02		06/17/08
1,4-Dichlorobenzene	106-46-7	LA-523-456	U	< 250	ug/kg			1.00	2.5e+02		06/17/08
Phenol	108-95-2	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
2,4-Dinitrotoluene	121-14-2	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
Pyrene	129-00-0	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
N-Nitrosodi-n-dipropylamine	621-64-7	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The Analyte detected in both the BLANK and the SAMPLE.(org)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

B - The analyte < the RDL but > = the IDL/MDL (inorg)
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-096
Sample # W08GR01501
Client ID: B1W0W4 GPP TRENT WSCF **Matrix:** SOIL

Group #: WSCF20081149
Department: Organic
Sampled: 06/05/08
Received: 06/05/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Acenaphthene	83-32-9	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
Pentachlorophenol	87-86-5	LA-523-456	U	< 210	ug/kg			1.00	2.1e+02		06/17/08
2-Chlorophenol	95-57-8	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
Bis(2-ethylhexyl) phthalate	117-81-7	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
Tributyl phosphate	126-73-8	LA-523-456	U	< 140	ug/kg			1.00	1.4e+02		06/17/08
1,2,4-Trimethylbenzene	95-63-6	LA-523-456	U	< 190	ug/kg			1.00	1.9e+02		06/17/08

MDL=Minimum Detection Limit
RQ=Result Qualifier
TP Err=Total Propagated Error
DF=Dilution Factor

B - The Analyte detected in both the BLANK and the SAMPLE.(org)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

B - The analyte < the RDL but >= the IDL/MDL (inorg)
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

• - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-096
Sample # W08GR01505
Client ID: B1W0W2 GPP WSCF TRENT **Matrix:** SOIL

Group #: WSCF20081149
Department: Organic
Sampled: 06/05/08
Received: 06/05/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
VOA Ground Water Protection											
1,1-Dichloroethene	75-35-4	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Trichloroethene	79-01-6	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Benzene	71-43-2	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Toluene	108-88-3	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Chlorobenzene	108-90-7	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Tetrachloroethene	127-18-4	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Xylenes (total)	1330-20-7	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Carbon tetrachloride	56-23-5	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Acetone	67-64-1	LA-523-455	B	90.0	ug/kg			1.00	1.0		06/10/08
Chloroform	67-66-3	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Vinyl chloride	75-01-4	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Methylenechloride	75-09-2	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Hexane	110-54-3	LA-523-455	U	< 1.00	ug/kg			1.00	1.0		06/10/08
Tetrahydrofuran	109-99-9	LA-523-455	U	< 2.10	ug/kg			1.00	2.1		06/10/08
Acetonitrile	75-05-8	LA-523-455	U	< 2.10	ug/kg			1.00	2.1		06/10/08

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor

B - The Analyte detected in both the BLANK and the SAMPLE.(org)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

B - The analyte < the RDL but > = the IDL/MDL (inorg)
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081149
Matrix: SOLID
Test: NWTPH-D TPH Diesel Range (Wa)

Sample Date: 06/05/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01501											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	ortho-Terphenyl Surr	84-15-1	21718	106.000	% Recov	70.000	130.000				07/08/08
MS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	111080	108.000	% Recov	75.000	125.000				07/08/08
MSD	ortho-Terphenyl Surr	84-15-1	20407	99.100	% Recov	70.000	130.000				07/08/08
MSD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	104290	101.000	% Recov	75.000	125.000				07/08/08
SPK-RPD	ortho-Terphenyl Surr	84-15-1	99.100		RPD			6.728	20.000		07/08/08
SPK-RPD	Total Pet. Hydrocarbons Diesel	TPHDIESEL	101.000		RPD			6.699	20.000		07/08/08
SURR	ortho-Terphenyl Surr	84-15-1	20450	98.900	% Recov	70.000	130.000				07/08/08
BATCH QC											
BLANK	Kerosene	TPHKEROSENE	< 3000	n/a	ug/Kg					U	07/08/08
BLANK	ortho-Terphenyl Surr	84-15-1	18643	93.200	% Recov	70.000	130.000				07/08/08
BLANK	Total Pet. Hydrocarbons Diesel	TPHDIESEL	< 3000	n/a	ug/Kg					U	07/08/08
LCS	ortho-Terphenyl Surr	84-15-1	19725	98.600	% Recov	70.000	130.000				07/08/08
LCS	Total Pet. Hydrocarbons Diesel	TPHDIESEL	98345	98.300	% Recov	80.000	120.000				07/08/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081149
Matrix: SOLID
Test: PCBs complete list

Sample Date: 06/05/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01501											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Aroclor-1260	11096-82-5	169.12	82.800	% Recov	75.000	125.000				07/09/08
MS	Decachlorobiphenyl	2051-24-3	166.89	81.700	% Recov	50.000	150.000				07/09/08
MS	Tetrachloro-m-xylene	877-09-8	161.07	78.900	% Recov	50.000	150.000				07/09/08
MSD	Aroclor-1260	11096-82-5	169.79	85.200	% Recov	75.000	125.000				07/09/08
MSD	Decachlorobiphenyl	2051-24-3	166.75	83.700	% Recov	50.000	150.000				07/09/08
MSD	Tetrachloro-m-xylene	877-09-8	160.24	80.400	% Recov	50.000	150.000				07/09/08
SPK-RPD	Aroclor-1260	11096-82-5	85.200		RPD			2.857	25.000		07/09/08
SPK-RPD	Decachlorobiphenyl	2051-24-3	83.700		RPD			2.418	20.000		07/09/08
SPK-RPD	Tetrachloro-m-xylene	877-09-8	80.400		RPD			1.883	20.000		07/09/08
SURR	Decachlorobiphenyl	2051-24-3	171.48	83.300	% Recov	50.000	150.000				07/09/08
SURR	Tetrachloro-m-xylene	877-09-8	168.52	81.900	% Recov	50.000	150.000				07/09/08
BATCH QC											
BLANK	Aroclor-1016	12674-11-2	< 10	n/a	UGKG					U	07/09/08
BLANK	Aroclor-1221	11104-28-2	< 20	n/a	ug/Kg					U	07/09/08
BLANK	Aroclor-1232	11141-16-5	< 10	n/a	ug/Kg					U	07/09/08
BLANK	Aroclor-1242	53469-21-9	< 10	n/a	ug/Kg					U	07/09/08
BLANK	Aroclor-1248	12672-29-6	< 10	n/a	ug/Kg					U	07/09/08
BLANK	Aroclor-1254	11097-69-1	< 10	n/a	ug/Kg					U	07/09/08
BLANK	Aroclor-1260	11096-82-5	< 10	n/a	ug/Kg					U	07/09/08
BLANK	Aroclor-1262	37324-23-5	< 10	n/a	ug/Kg					U	07/09/08
BLANK	Aroclor-1268	11100-14-4	< 10	n/a	ug/Kg					U	07/09/08
BLANK	Decachlorobiphenyl	2051-24-3	157.70	78.800	% Recov	50.000	150.000				07/09/08
BLANK	Tetrachloro-m-xylene	877-09-8	154.97	77.500	% Recov	50.000	150.000				07/09/08
LCS	Aroclor-1260	11096-82-5	168.79	84.400	% Recov	70.000	130.000				07/09/08
LCS	Decachlorobiphenyl	2051-24-3	169.48	84.700	% Recov	50.000	150.000				07/09/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081149
Matrix: SOLID
Test: PCBs complete list

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Tetrachloro-m-xylene	877-09-8	159.58	79.800	% Recov	50.000	150.000				07/09/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081149
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

Sample Date: 06/05/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01501											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	2-Fluorophenol(Surr)	367-12-4	3864.9	93.300	% Recov	72.000	120.000				06/17/08
SURR	2-Fluorobiphenyl(Surr)	321-60-8	4018.9	97.100	% Recov	66.000	122.000				06/17/08
SURR	Nitrobenzene-d5(Surr)	4165-60-0	3850.2	93.000	% Recov	63.000	125.000				06/17/08
SURR	Phenol-d5(Surr)	4165-62-2	4060.9	98.100	% Recov	66.000	124.000				06/17/08
SURR	2,4,6-Tribromophenol(Surr)	118-79-6	3686.0	89.000	% Recov	49.000	120.000				06/17/08
SURR	Terphenyl-d14(Surr)	98904-43-9	3588.6	86.700	% Recov	58.000	128.000				06/17/08
Lab ID: W08GR01666											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	1,2,4-Trichlorobenzene	120-82-1	3430.6	80.700	% Recov	75.000	121.000				06/18/08
MS	1,4-Dichlorobenzene	106-46-7	3248.0	76.400	% Recov	68.000	121.000				06/18/08
MS	2,4-Dinitrotoluene	121-14-2	3217.2	75.600	% Recov	66.000	113.000				06/18/08
MS	2-Fluorophenol(Surr)	367-12-4	3289.9	77.400	% Recov	72.000	120.000				06/18/08
MS	Acenaphthene	83-32-9	3508.8	82.500	% Recov	69.000	125.000				06/18/08
MS	4-Chloro-3-methylphenol	59-50-7	5131.0	80.400	% Recov	68.000	116.000				06/18/08
MS	2-Chlorophenol	95-57-8	5089.3	79.800	% Recov	65.000	124.000				06/18/08
MS	N-Nitrosodi-n-dipropylamine	621-64-7	3338.1	78.500	% Recov	69.000	127.000				06/18/08
MS	2-Fluorobiphenyl(Surr)	321-60-8	3301.6	77.600	% Recov	66.000	122.000				06/18/08
MS	Phenol	108-95-2	5170.6	81.000	% Recov	71.000	122.000				06/18/08
MS	Nitrobenzene-d5(Surr)	4165-60-0	3126.1	73.500	% Recov	63.000	125.000				06/18/08
MS	4-Nitrophenol	100-02-7	4944.6	77.500	% Recov	55.000	113.000				06/18/08
MS	Pentachlorophenol	87-86-5	4930.5	77.300	% Recov	50.000	113.000				06/18/08
MS	Phenol-d5(Surr)	4165-62-2	3219.5	75.700	% Recov	66.000	124.000				06/18/08
MS	Pyrene	129-00-0	2881.4	67.700	% Recov	67.000	125.000				06/18/08
MS	2,4,6-Tribromophenol(Surr)	118-79-6	3328.3	78.300	% Recov	49.000	120.000				06/18/08
MS	Terphenyl-d14(Surr)	98904-43-9	3008.4	70.700	% Recov	58.000	128.000				06/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081149
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

Sample Date: 06/11/08
Receive Date:06/11/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MSD	1,2,4-Trichlorobenzene	120-82-1	3452.8	81.400	% Recov	75.000	121.000				06/18/08
MSD	1,4-Dichlorobenzene	106-46-7	3404.7	80.300	% Recov	68.000	121.000				06/18/08
MSD	2,4-Dinitrotoluene	121-14-2	3594.1	84.800	% Recov	66.000	113.000				06/18/08
MSD	2-Fluorophenol(Surr)	367-12-4	3338.2	78.700	% Recov	72.000	120.000				06/18/08
MSD	Acenaphthene	83-32-9	3730.9	88.000	% Recov	69.000	125.000				06/18/08
MSD	4-Chloro-3-methylphenol	59-50-7	5637.1	88.600	% Recov	68.000	116.000				06/18/08
MSD	2-Chlorophenol	95-57-8	5461.7	85.900	% Recov	65.000	124.000				06/18/08
MSD	N-Nitrosodi-n-dipropylamine	621-64-7	3524.4	83.100	% Recov	69.000	127.000				06/18/08
MSD	2-Fluorobiphenyl(Surr)	321-60-8	3529.6	83.300	% Recov	66.000	122.000				06/18/08
MSD	Phenol	108-95-2	5679.8	89.300	% Recov	71.000	122.000				06/18/08
MSD	Nitrobenzene-d5(Surr)	4165-60-0	3327.0	78.500	% Recov	63.000	125.000				06/18/08
MSD	4-Nitrophenol	100-02-7	5803.2	91.300	% Recov	55.000	113.000				06/18/08
MSD	Pentachlorophenol	87-86-5	5541.0	87.100	% Recov	50.000	113.000				06/18/08
MSD	Phenol-d5(Surr)	4165-62-2	3666.9	86.500	% Recov	66.000	124.000				06/18/08
MSD	Pyrene	129-00-0	3035.2	71.600	% Recov	67.000	125.000				06/18/08
MSD	2,4,6-Tribromophenol(Surr)	118-79-6	3783.0	89.200	% Recov	49.000	120.000				06/18/08
MSD	Terphenyl-d14(Surr)	98904-43-9	3271.4	77.200	% Recov	58.000	128.000				06/18/08
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	81.400		RPD			0.864	20.000		06/17/08
SPK-RPD	1,4-Dichlorobenzene	106-46-7	80.300		RPD			4.978	20.000		06/17/08
SPK-RPD	2,4-Dinitrotoluene	121-14-2	84.800		RPD			11.471	20.000		06/17/08
SPK-RPD	2-Fluorophenol(Surr)	367-12-4	78.700		RPD			1.666	20.000		06/17/08
SPK-RPD	Acenaphthene	83-32-9	88.000		RPD			6.452	20.000		06/17/08
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	88.600		RPD			9.704	20.000		06/17/08
SPK-RPD	2-Chlorophenol	95-57-8	85.900		RPD			7.363	20.000		06/17/08
SPK-RPD	N-Nitrosodi-n-dipropylamine	621-64-7	83.100		RPD			5.693	20.000		06/17/08
SPK-RPD	2-Fluorobiphenyl(Surr)	321-60-8	83.300		RPD			7.085	20.000		06/17/08
SPK-RPD	Phenol	108-95-2	89.300		RPD			9.748	20.000		06/17/08
SPK-RPD	Nitrobenzene-d5(Surr)	4165-60-0	78.500		RPD			6.579	20.000		06/17/08
SPK-RPD	4-Nitrophenol	100-02-7	91.300		RPD			16.351	20.000		06/17/08
SPK-RPD	Pentachlorophenol	87-86-5	87.100		RPD			11.922	20.000		06/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081149
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

Sample Date: 06/11/08
Receive Date:06/11/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
SPK-RPD	Phenol-d5(Surr)	4165-62-2	86.500		RPD			13.317	20.000		06/17/08
SPK-RPD	Pyrene	129-00-0	71.600		RPD			5.599	20.000		06/17/08
SPK-RPD	2,4,6-Tribromophenol(Surr)	118-79-6	89.200		RPD			13.015	20.000		06/17/08
SPK-RPD	Terphenyl-d14(Surr)	98904-43-9	77.200		RPD			8.790	20.000		06/17/08

BATCH QC

BLANK	1,2,4-Trimethylbenzene	95-63-6	< 180	n/a	ug/Kg					U	06/17/08
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 140	n/a	ug/Kg					U	06/17/08
BLANK	1,4-Dichlorobenzene	106-46-7	< 240	n/a	ug/Kg					U	06/17/08
BLANK	2,4-Dinitrotoluene	121-14-2	< 140	n/a	ug/Kg					U	06/17/08
BLANK	2-Fluorophenol(Surr)	367-12-4	3527.0	88.200	% Recov	72.000	120.000				06/17/08
BLANK	Acenaphthene	83-32-9	< 140	n/a	ug/Kg					U	06/17/08
BLANK	Bis(2-ethylhexyl) phthalate	117-81-7	< 140	n/a	ug/Kg					U	06/17/08
BLANK	4-Chloro-3-methylphenol	59-50-7	< 140	n/a	ug/Kg					U	06/17/08
BLANK	2-Chlorophenol	95-57-8	< 140	n/a	ug/Kg					U	06/17/08
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 140	n/a	ug/Kg					U	06/17/08
BLANK	2-Fluorobiphenyl(Surr)	321-60-8	3653.2	91.300	% Recov	66.000	122.000				06/17/08
BLANK	Phenol	108-95-2	< 140	n/a	ug/Kg					U	06/17/08
BLANK	Nitrobenzene-d5(Surr)	4165-60-0	3687.6	92.200	% Recov	63.000	125.000				06/17/08
BLANK	4-Nitrophenol	100-02-7	< 200	n/a	ug/Kg					U	06/17/08
BLANK	Pentachlorophenol	87-86-5	< 200	n/a	ug/Kg					U	06/17/08
BLANK	Phenol-d5(Surr)	4165-62-2	3711.2	92.800	% Recov	66.000	124.000				06/17/08
BLANK	Pyrene	129-00-0	< 140	n/a	ug/Kg					U	06/17/08
BLANK	Tributyl phosphate	126-73-8	< 140	n/a	ug/Kg					U	06/17/08
BLANK	2,4,6-Tribromophenol(Surr)	118-79-6	3388.5	84.700	% Recov	49.000	120.000				06/17/08
BLANK	Terphenyl-d14(Surr)	98904-43-9	3339.5	83.500	% Recov	58.000	128.000				06/17/08
LCS	1,2,4-Trichlorobenzene	120-82-1	3411	85.275	% Recov	76.000	118.000				06/17/08
LCS	1,4-Dichlorobenzene	106-46-7	3008.5	75.200	% Recov	68.000	121.000				06/17/08
LCS	2,4-Dinitrotoluene	121-14-2	2915.8	72.900	% Recov	68.000	112.000				06/17/08
LCS	2-Fluorophenol(Surr)	367-12-4	3011.5	75.300	% Recov	50.000	110.000				06/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Organic**

SDG Number: WSCF20081149
Matrix: SOLID
Test: SW-846 8270C Semi-Vols

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Acenaphthene	83-32-9	3050.8	76.300	% Recov	75.000	121.000				06/17/08
LCS	4-Chloro-3-methylphenol	59-50-7	4429.0	73.800	% Recov	68.000	117.000				06/17/08
LCS	2-Chlorophenol	95-57-8	5243	87.383	% Recov	84.000	114.000				06/17/08
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	3218	80.450	% Recov	76.000	119.000				06/17/08
LCS	2-Fluorobiphenyl(Surr)	321-60-8	3170.2	79.300	% Recov	58.000	109.000				06/17/08
LCS	Phenol	108-95-2	5468	91.133	% Recov	80.000	113.000				06/17/08
LCS	Nitrobenzene-d5(Surr)	4165-60-0	2959.4	74.000	% Recov	60.000	118.000				06/17/08
LCS	4-Nitrophenol	100-02-7	4396.0	73.300	% Recov	42.000	123.000				06/17/08
LCS	Pentachlorophenol	87-86-5	4328.1	72.100	% Recov	55.000	120.000				06/17/08
LCS	Phenol-d5(Surr)	4165-62-2	3167.8	79.200	% Recov	59.000	116.000				06/17/08
LCS	Pyrene	129-00-0	2740.3	68.500	% Recov	67.000	122.000				06/17/08
LCS	2,4,6-Tribromophenol(Surr)	118-79-6	2947.6	73.700	% Recov	60.000	120.000				06/17/08
LCS	Terphenyl-d14(Surr)	98904-43-9	2895.8	72.400	% Recov	60.000	120.000				06/17/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081149
Matrix: SOLID
Test: VOA Ground Water Protection

Sample Date: 06/02/08
Receive Date:06/04/08

Lab ID: W08GR01488
BATCH QC ASSOCIATED WITH SAMPLE

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
MS	1,1-Dichloroethene	75-35-4	22.840	90.300	% Recov	63.000	117.000				06/10/08
MS	Benzene	71-43-2	24.800	98.000	% Recov	75.000	129.000				06/10/08
MS	4-Bromofluorobenzene(Surr)	460-00-4	55.420	110.000	% Recov	75.000	125.000				06/10/08
MS	Chlorobenzene	108-90-7	26.420	104.000	% Recov	79.000	119.000				06/10/08
MS	1,2-Dichloroethane-d4(Surr)	17060-07-0	59.470	118.000	% Recov	75.000	125.000				06/10/08
MS	Toluene-d8(Surr)	2037-26-5	53.370	105.000	% Recov	75.000	125.000				06/10/08
MS	Toluene	108-88-3	25.590	101.000	% Recov	76.000	120.000				06/10/08
MS	Trichloroethene	79-01-6	21.260	84.100	% Recov	73.000	123.000				06/10/08
MSD	1,1-Dichloroethene	75-35-4	21.430	89.700	% Recov	63.000	117.000				06/10/08
MSD	Benzene	71-43-2	23.360	97.800	% Recov	75.000	129.000				06/10/08
MSD	4-Bromofluorobenzene(Surr)	460-00-4	52.980	111.000	% Recov	75.000	125.000				06/10/08
MSD	Chlorobenzene	108-90-7	24.690	103.000	% Recov	79.000	119.000				06/10/08
MSD	1,2-Dichloroethane-d4(Surr)	17060-07-0	55.760	117.000	% Recov	75.000	125.000				06/10/08
MSD	Toluene-d8(Surr)	2037-26-5	50.610	106.000	% Recov	75.000	125.000				06/10/08
MSD	Toluene	108-88-3	24.110	101.000	% Recov	76.000	120.000				06/10/08
MSD	Trichloroethene	79-01-6	20.140	84.300	% Recov	73.000	123.000				06/10/08
SPK-RPD	1,1-Dichloroethene	75-35-4	89.700		RPD			0.667	20.000		06/10/08
SPK-RPD	Benzene	71-43-2	97.800		RPD			0.204	20.000		06/10/08
SPK-RPD	4-Bromofluorobenzene(Surr)	460-00-4	111.000		RPD			0.905	20.000		06/10/08
SPK-RPD	Chlorobenzene	108-90-7	103.000		RPD			0.966	20.000		06/10/08
SPK-RPD	1,2-Dichloroethane-d4(Surr)	17060-07-0	117.000		RPD			0.851	20.000		06/10/08
SPK-RPD	Toluene-d8(Surr)	2037-26-5	106.000		RPD			0.948	20.000		06/10/08
SPK-RPD	Toluene	108-88-3	101.000		RPD			0.000	20.000		06/10/08
SPK-RPD	Trichloroethene	79-01-6	84.300		RPD			0.238	20.000		06/10/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081149
Matrix: SOLID
Test: VOA Ground Water Protection

Sample Date: 06/05/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01505											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	4-Bromofluorobenzene(Surr)	460-00-4	57.350	110.000	% Recov	75.000	125.000				06/10/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	61.090	118.000	% Recov	75.000	125.000				06/10/08
SURR	Toluene-d8(Surr)	2037-26-5	55.170	106.000	% Recov	80.000	126.000				06/10/08
BATCH QC											
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Acetone	67-64-1	190	190.000	ug/Kg						06/10/08
BLANK	Benzene	71-43-2	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	4-Bromofluorobenzene(Surr)	460-00-4	56.020	112.000	% Recov	75.000	125.000				06/10/08
BLANK	Carbon tetrachloride	56-23-5	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Chloroform	67-66-3	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Chlorobenzene	108-90-7	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	1,2-Dichloroethane-d4(Surr)	17060-07-0	58.460	117.000	% Recov	75.000	125.000				06/10/08
BLANK	Hexane	110-54-3	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Methylenechloride	75-09-2	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Tetrachloroethene	127-18-4	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Xylenes (total)	1330-20-7	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Tetrahydrofuran	109-99-9	< 2.0	n/a	ug/Kg					U	06/10/08
BLANK	Toluene-d8(Surr)	2037-26-5	51.760	104.000	% Recov	80.000	126.000				06/10/08
BLANK	Toluene	108-88-3	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Trichloroethene	79-01-6	< 1.0	n/a	ug/Kg					U	06/10/08
BLANK	Vinyl chloride	75-01-4	< 1.0	n/a	ug/Kg					U	06/10/08
LCS	1,1-Dichloroethene	75-35-4	22.130	88.500	% Recov	75.000	125.000				06/10/08
LCS	Benzene	71-43-2	23.270	93.100	% Recov	75.000	125.000				06/10/08
LCS	4-Bromofluorobenzene(Surr)	460-00-4	55.270	111.000	% Recov	75.000	125.000				06/10/08
LCS	Chlorobenzene	108-90-7	25.020	100.000	% Recov	75.000	125.000				06/10/08
LCS	1,2-Dichloroethane-d4(Surr)	17060-07-0	57.440	115.000	% Recov	75.000	125.000				06/10/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20081149
Matrix: SOLID
Test: VOA Ground Water Protection

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
LCS	Toluene-d8(Surr)	2037-26-5	52.280	105.000	% Recov	80.000	126.000				06/10/08
LCS	Toluene	108-88-3	24.120	96.500	% Recov	75.000	125.000				06/10/08
LCS	Trichloroethene	79-01-6	20.560	82.200	% Recov	75.000	125.000				06/10/08

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-096

Group #: WSCF20081149
Department: Organic

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		Organics: All results are moisture corrected and reported on a dry weight basis. cgc ICP-MS: Copper LCS 84% of actual. Cadmium LCS 94% of actual. Nickel 90% of actual. All are below the laboratory statical on copper and nickel. Cadmium result below the MDL

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample
VALTEST - Test Validation
LOGTEST - Login for Tests
TESTDATA - Test Data Entry

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WSCF
ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number: F08-096
Sample # W08GR01501
Client ID: B1W0W4 GPP WSCF TRENT **Matrix:** SOIL

Group #: WSCF20081149
Department: Radiochemistry
Sampled: 06/05/08
Received: 06/05/08

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Gamma Energy Analysis-grd H2O											
Americium-241	14596-10-2	LA-508-481	U	-9.49e-03	pCi/g	+-0.0532	pCi/g	1.00	0.086		06/20/08
Cobalt-60	10198-40-0	LA-508-481	U	-7.41e-04	pCi/g	+-7.04e-03	pCi/g	1.00	0.012		06/20/08
Cesium-137	10045-97-3	LA-508-481	U	3.91e-03	pCi/g	+-7.73e-03	pCi/g	1.00	0.012		06/20/08
Europium-152	14683-23-9	LA-508-481	U	9.86e-03	pCi/g	+-0.0201	pCi/g	1.00	0.032		06/20/08
Europium-154	15585-10-1	LA-508-481	U	-8.00e-03	pCi/g	+-0.0225	pCi/g	1.00	0.037		06/20/08
Europium-155	14391-16-3	LA-508-481	U	0.0351	pCi/g	+-0.0271	pCi/g	1.00	0.047		06/20/08
Niobium-94	14681-63-1	LA-508-481	U	9.62e-03	pCi/g	+-6.40e-03	pCi/g	1.00	0.011		06/20/08
Radium-226	13982-63-3	LA-508-481		0.438	pCi/g	+-0.0744	pCi/g	1.00	0.021		06/20/08
Radium-228	15262-20-1	LA-508-481		0.569	pCi/g	+-0.102	pCi/g	1.00	0.037		06/20/08
Gross Alpha/Gross Beta (AB32)											
Gross alpha	12587-46-1	LA-508-415	U	1.10	pCi/g	+-0.902	pCi/g	1.00	1.4		06/16/08
Plutonium Isotopics by AEA											
Plutonium-238	13981-16-3	LA-508-471	U	8.30e-03	pCi/g	+-0.0277	pCi/g	1.00	0.050		07/21/08
Pu-239/240 by AEA	PU-239/240	LA-508-471	U	2.80e-03	pCi/g	+-9.72e-03	pCi/g	1.00	0.020		07/21/08
Pu-242 tracer by AEA	PU242	LA-508-471		6.00	pCi/g			1.00	0.029		07/21/08
Strontium 89/90											
Strontium-89/90	SR-RAD	LA-508-415	U	-0.520	pCi/g	+-0.588	pCi/g	1.00	0.34		06/18/08
Sr-85 Tracer by Beta Counting	SR85	LA-508-415		101	Percent			1.00	0.0		06/18/08
Uranium Isotopics by AEA											
Uranium-233/234	U-233/234	LA-508-471		0.120	pCi/g	+-0.0420	pCi/g	1.00	4.7e-03		07/21/08
Uranium-235	15117-96-1	LA-508-471	U	0.0110	pCi/g	+-0.0108	pCi/g	1.00	0.014		07/21/08
Uranium-238	U-238	LA-508-471		0.120	pCi/g	+-0.0420	pCi/g	1.00	4.7e-03		07/21/08
U-232 tracer by AEA	U232	LA-508-471		3.90	pCi/g			1.00	0.019		07/21/08

MDL = Minimum Detection Limit
RQ = Result Qualifier
TP Err = Total Propagated Error
DF = Dilution Factor

B - The Analyte detected in both the BLANK and the SAMPLE.(org)
D - Analyte was identified at a secondary dilution factor(inorg)
U - Analyzed for but not detected above limiting criteria(inorg)

B - The analyte < the RDL but > = the IDL/MDL (inorg)
E - Analyte is an estimate, has potentially larger errors(inorg)
U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated; + - Indicates more than six qualifier symbols

WSCF
TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number F08-096 :F08-096

Group #: WSCF20081149
Department: Radiochemistry

Sample #	Client ID			Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	AC-228				0.51	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	AC-228 Count Error				21	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	BI-212				0.41	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	BI-212 Count Error				30	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	BI-214				0.53	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	BI-214 Count Error				15	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	CS-134				0.026	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	CS-134 Count Error				39	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	K-40				15	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	K-40 Count Error				13	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	PB-212				0.66	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	PB-212 Count Error				9.6	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	PB-214				0.78	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	PB-214 Count Error				22	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	SN-126				0.13	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	SN-126 Count Error				26	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	TH-234				0.74	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	TH-234 Count Error				31	%
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	TL-208				0.19	pCi/g
W08GR01501	B1W0W4	GPP	TRENT	Gamma Energy Analysis-grd H2O	TL-208 Count Error				15	%

RQ=Result Qualifier

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081149
Matrix: SOLID
Test: Gamma Energy Analysis-grd H2O

Sample Date: 06/04/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01494											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Cesium-137	10045-97-3	U3.919e-3		RPD			n/a	20.000		06/23/08
DUP	Europium-154	15585-10-1	U-8.322e-3		RPD			n/a	20.000		06/23/08
BATCH QC											
BLANK	Americium-241	14596-10-2	U1.099e-2	n/a	pCi/g	-10.000	1000.000				06/13/08
BLANK	Cobalt-60	10198-40-0	U-2.166e-3	n/a	pCi/g	-10.000	1000.000				06/13/08
BLANK	Cesium-137	10045-97-3	U-1.168e-3	n/a	pCi/g	-10.000	1000.000				06/13/08
BLANK	Europium-152	14683-23-9	U-4.984e-3	n/a	pCi/g	-10.000	1000.000				06/13/08
BLANK	Europium-154	15585-10-1	U2.43e-3	n/a	pCi/g	-10.000	1000.000				06/13/08
BLANK	Europium-155	14391-16-3	U3.147e-3	n/a	pCi/g	-10.000	1000.000				06/13/08
BLANK	Niobium-94	14681-63-1	U2.758e-4	n/a	pCi/g	-10.000	1000.000				06/13/08
BLANK	Radium-226	13982-63-3	7.223e-2	0.072	pCi/g	-10.000	1000.000				06/13/08
BLANK	Radium-228	15262-20-1	5.01e-2	0.050	pCi/g	-10.000	1000.000				06/13/08
LCS	Americium-241	14596-10-2	15270	93.110	% Recov	80.000	120.000				06/24/08
LCS	Cobalt-60	10198-40-0	10300	103.622	% Recov	80.000	120.000				06/24/08
LCS	Cesium-137	10045-97-3	6366	105.397	% Recov	80.000	120.000				06/24/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Radiochemistry**

SDG Number: WSCF20081149
Matrix: SOLID
Test: Gross Alpha/Gross Beta (AB32)

Sample Date: 06/05/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01501											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Gross alpha	12587-46-1	U1.2		RPD			n/a	20.000		06/16/08
BATCH QC											
BLANK	Gross alpha	12587-46-1	U1.7E-01	n/a	pCi/g	-10.000	10.000				06/16/08
LCS	Gross alpha	12587-46-1	7.65	98.837	% Recov	80.000	120.000				06/16/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20081149
Matrix: SOLID
Test: Plutonium Isotopics by AEA

Sample Date: 06/04/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01497											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Plutonium-238	13981-16-3	U3.3e-2		RPD			n/a	20.000		07/21/08
DUP	Pu-239/240 by AEA	PU-239/240	U9.5e-3		RPD			n/a	20.000		07/21/08
DUP	Pu-242 tracer by AEA	PU242	5.962	70.720	% Recov	30.000	105.000				07/21/08
Lab ID: W08GR01501											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Pu-242 tracer by AEA	PU242	5.996	56.950	% Recov	30.000	105.000				07/21/08
BATCH QC											
BLANK	Plutonium-238	13981-16-3	U1.4e-2	n/a	pCi/g	-10.000	1000.000				07/21/08
BLANK	Pu-239/240 by AEA	PU-239/240	U3.9e-3	n/a	pCi/g	-10.000	1000.000				07/21/08
BLANK	Pu-242 tracer by AEA	PU242	6.236	85.780	% Recov	30.000	105.000				07/21/08
LCS	Pu-239/240 by AEA	PU-239/240	12.88	100.272	% Recov	80.000	120.000				07/21/08
LCS	Pu-242 tracer by AEA	PU242	17.3	84.450	% Recov	30.000	105.000				07/21/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Radiochemistry**

SDG Number: WSCF20081149
Matrix: SOLID
Test: Strontium 89/90

Sample Date: 06/04/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01494											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Sr-85 Tracer by Beta Counting	SR85	101.4	101.400	% Recov	30.000	105.000				06/18/08
DUP	Strontium-89/90	SR-RAD	9.3		RPD			6.250	20.000		06/18/08
Lab ID: W08GR01501											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Sr-85 Tracer by Beta Counting	SR85	101.4	101.400	% Recov	30.000	105.000				06/18/08
BATCH QC											
BLANK	Sr-85 Tracer by Beta Counting	SR85	115.8	115.800	% Recov	30.000	105.000			•	06/18/08
BLANK	Strontium-89/90	10098-97-2	U-8.8E-01	n/a	pCi/g	-10.000	300.000				06/18/08
LCS	Sr-85 Tracer by Beta Counting	SR85	101.6	101.600	% Recov	30.000	105.000				06/18/08
LCS	Strontium-89/90	10098-97-2	69.5	100.144	% Recov	80.000	120.000				06/18/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: **Radiochemistry**

SDG Number: WSCF20081149
Matrix: SOLID
Test: Uranium Isotopics by AEA

Sample Date: 06/04/08
Receive Date:06/05/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR01497											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	U-232 tracer by AEA	U232	3.926	96.140	% Recov	30.000	105.000				07/21/08
DUP	Uranium-233/234	U-233/234	0.37		RPD			7.792	20.000		07/21/08
DUP	Uranium-235	15117-96-1	4.5e-2		RPD			14.286	20.000		07/21/08
DUP	Uranium-238	U-238	0.36		RPD			0.000	20.000		07/21/08
Lab ID: W08GR01501											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	U-232 tracer by AEA	U232	3.949	98.020	% Recov	30.000	105.000				07/21/08
BATCH QC											
BLANK	U-232 tracer by AEA	U232	4.107	92.020	% Recov	30.000	105.000				07/21/08
BLANK	Uranium-233/234	13966-29-5	1.9e-2	0.019	pCi/g	-10.000	1000.000				07/21/08
BLANK	Uranium-235	15117-96-1	9.6e-3	0.010	pCi/g	-10.000	1000.000				07/21/08
BLANK	Uranium-238	24678-82-8	5.3e-3	0.005	pCi/g	-10.000	1000.000				07/21/08
LCS	U-232 tracer by AEA	U232	11.4	84.580	% Recov	30.000	105.000				07/21/08
LCS	Uranium-233/234	13966-29-5	n/a	n/a	% Recov	75.000	125.000				07/21/08
LCS	Uranium-235	15117-96-1	n/a	n/a	% Recov	75.000	125.000				07/21/08
LCS	Uranium-238	24678-82-8	21	110.789	% Recov	80.000	120.000				07/21/08

WSCF
ANALYTICAL COMMENT REPORT

Attention: Steve Trent
Project Number F08-096

Group #: WSCF20081149
Department: Radiochemistry

Sample #	Client ID	Lab Area	Test	Comment
		VALGROUP		Organics: All results are moisture corrected and reported on a dry weight basis. cgc ICP-MS: Copper LCS 84% of actual. Cadmium LCS 94% of actual. Nickel 90% of actual. All are below the laboratory statical on copper and nickel. Cadmium result below the MDL

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample
VALTEST - Test Validation
LOGTEST - Login for Tests
TESTDATA - Test Data Entry

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M4W41-SLF-08-763

ATTACHMENT 4

SAMPLE RECEIPT INFORMATION

Consisting of 5 pages
Including cover page

Waste Sampling and Characterization Facility
P.O. BOX 1970 S3-30, Richland, WA 99352
PHONE: (509) 373-7004/FAX: (509) 373-7134

File

Due 6/17/08

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
Attn: Steve Trent

Customer Code: GPP
PO#: 123055ES10
Group#: 20081149
Project#: F08-096
Proj Mgr: Steve Trent E6-35
Phone: 373-5869

The following samples were received from you on 06/05/08. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
W08GR01501	B1W0W4	GPP @2008 @GPP6010 PERSOLID	TRENT Solid, or handle as if solid @AB-32 @IC-30 @AEA-30 @PCBGPP @AEA-32 @SR89_90 @GEA-GPP @SVOCGPP @TPHI	06/05/08
W08GR01504	B1W0W3 MeOH	GPP @VOA-GPP	TRENT Solid, or handle as if solid	06/05/08
W08GR01505	B1W0W2 [illegible]	GPP @VOA-GPP	TRENT Solid, or handle as if solid	06/05/08

Test Acronym Description

Test Acronym	Description
@2008	ICP-200.8 MS All possible meta
@AB-32	Gross Alpha/Gross Beta (AB32)
@AEA-30	Plutonium Isotopics by AEA
@AEA-32	Uranium Isotopics by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@GPP6010	ICP Metals Analysis, Grd H20 P
@IC-30	Anions by Ion Chromatography
@PCBGPP	PCBs complete list
@SR89_90	Strontium 89/90
@SVOCGPP	SW-846 8270C Semi-Vols
@TPHD-WA	NWTPH-D TPH Diesel Range (Wa)
@VOA-GPP	VOA Ground Water Protection
PERSOLID	Percent Solids

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE	8N	DATA TURNAROUND
NCO Sampler	TRENT, SJ	373-5869	WIDRIG, DL	AIR QUALITY	☐	45 Days / 45 Days
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**			
C5941	200-SC-1 - Waste Management (Saturated Zone)		F08-096			
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**		
	HNF-N-488-1		123055ES10	GOVERNMENT VEHICLE		
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**			
Waste Sampling & Characterization						

MATRIX*: A=Air, DL=Drum Liquids, DS=Drum Solids, L=Liquid, O=Oil, S=Soil, SE=Sediment, T=Tissue, V=Vegitation, W=Water, WI=Wipe, X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS: Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C	None	None	None							
TYPE OF CONTAINER	aG	G/P	G/P	Square Bottle - Poly							
NO. OF CONTAINER(S)	1	1	1	1							
VOLUME	250mL	60mL	60mL	500mL							
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS	SEE ITEM (3) IN SPECIAL INSTRUCTIONS	SEE ITEM (4) IN SPECIAL INSTRUCTIONS							

20081149

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME										
B1W0W4 W08GR0154	SOIL	6/5/2008	1025	X	X	X	X						

ICED

028738 028784 028784

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible] / [illegible]	6-5-08/1400	[illegible] / [illegible]	6-5-08/1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

Sample @ 295 Feet. Drum Number SC1-08-049 / 0050901. Radioactive tie to B1WOW1.
(1)Semi-VOA - 8270B (TCL) {Bis(2-ethylhexyl) phthalate} Semi-VOA - 8270B (Add-On) {1,2,4-Trimethylbenzene, Tributyl phosphate} TPH-DieselKerosene Range - WTPH-D {Total petroleum hydrocarbons - kerosene range} PCBs - 8082;
(2)ICP/MS - 200.8 (TAL) {Barium, Cadmium, Chromium, Copper, Nickel, Silver, Vanadium, Zinc} ICP/MS - 200.8 (Add-on) {Arsenic, Lead, Selenium, Uranium} 200.8_HG - ICPMS; ICP Metals - ~~6010B~~ (Add-On) {Beryllium} 200.8
(3)IC Anions - 300.0 {Fluoride, Nitrogen in Nitrate, Sulfate}
(4)Gamma Spectroscopy {Cesium-137, Cobalt-60, Europium-152, Europium-154, Europium-155} Gamma Spec - Add-on {Americium-241, Niobium-94, Radium-226, Radium-228} Gross Alpha {Gross alpha} Isotopic Plutonium; Isotopic Uranium; Strontium-89,90 -- Total Sr;

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

Fluor Hanford Inc. | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | F08-096-003 | PAGE 1 OF 1

COLLECTOR NCO Sampler	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE 8N	DATA TURNAROUND
SAMPLING LOCATION C5941	PROJECT DESIGNATION 200-SC-1 - Waste Management (Saturated Zone)		SAF NO. F08-096	AIR QUALITY ☐	45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO. HNF N-488-1	ACTUAL SAMPLE DEPTH	COA 123055ES10	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.		

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool~4C
TYPE OF CONTAINER	aG/S
NO. OF CONTAINER(S)	1
VOLUME	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME	
B1W0W3 W096W1504	SOIL	6/5/2008	1025	X

036004

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	6-5-08 / 1400	[illegible]	6-5-08 / 1400

SPECIAL INSTRUCTIONS
Sample @ 295 Feet. Drum Number SC1-08-049 / 0050901. Radioactive tie to B1WOW1.
(1)VOA - 5035/8260 (TCL); VOA - 5035/8260 - (Add-On) {Acetonitrile, Hexane, Tetrahydrofuran}

ICED

LABORATORY SECTION	RECEIVED BY	TITLE	DATE/TIME
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD	DISPOSED BY	DATE/TIME

A-6003-618(01/06)

COLLECTOR	COMPANY CONTACT	TELEPHONE NO.	PROJECT COORDINATOR	PRICE CODE	8N	DATA TURNAROUND
NCO Sampler	TRENT, SJ	373-5869	WIDRIG, DL			
SAMPLING LOCATION	**PROJECT DESIGNATION**		**SAF NO.**	**AIR QUALITY**	☐	**45 Days / 45 Days**
CS941	200-SC-1 - Waste Management (Saturated Zone)		F08-096			
ICE CHEST NO.	**FIELD LOGBOOK NO.**	**ACTUAL SAMPLE DEPTH**	**COA**	**METHOD OF SHIPMENT**		
	HNF-N-488-1		123055ES10	GOVERNMENT VEHICLE		
SHIPPED TO	**OFFSITE PROPERTY NO.**		**BILL OF LADING/AIR BILL NO.**			
Waste Sampling & Characterization						

MATRIX*
A=Air
DL=Drum Liquids
DS=Drum Solids
L=Liquid
O=Oil
S=Soil
SE=Sediment
T=Tissue
V=Vegitation
W=Water
WI=Wipe
X=Other

POSSIBLE SAMPLE HAZARDS/ REMARKS
Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)

SPECIAL HANDLING AND/OR STORAGE

PRESERVATION	Cool <-7C and >-20C	Cool~4C
TYPE OF CONTAINER	aG/S	aG/S
NO. OF CONTAINER(S)	5	3
VOLUME	40mL	40mL
SAMPLE ANALYSIS	SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SEE ITEM (2) IN SPECIAL INSTRUCTIONS

SAMPLE NO.	MATRIX*	SAMPLE DATE	SAMPLE TIME			
B1W0W2 W086R01505	SOIL	6/5/2008	1025	X	X	
				731211	732110	

ICEN

CHAIN OF POSSESSION / **SIGN/ PRINT NAMES**

RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
[illegible]	6-5-08 / 1400	[illegible]	6-5-08 1400
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME

SPECIAL INSTRUCTIONS

Sample @ 295 Feet. Drum Number SC1-08-049 / 0050901. Radioactive tie to B1WOW1.
(1)VOA - 5035/8260 (LOW LEVEL) {Acetone, Benzene, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Toluene, Vinyl chloride, Xylenes (total)} VOA - 5035/8260 (LOW LEVEL) - (Add-On) {Acetonitrile, Hexane, Tetrahydrofuran}
(2)VOA - 5035/8260 (HIGH LEVEL) {Acetone, Benzene, Carbon tetrachloride, Chloroform, Methylene chloride, Tetrachloroethene, Toluene, Vinyl chloride, Xylenes (total)} VOA - 5035/8260 (HIGH LEVEL) - (Add-On) {Acetonitrile, Hexane, Tetrahydrofuran}

LABORATORY SECTION	**RECEIVED BY**	**TITLE**	**DATE/TIME**
FINAL SAMPLE DISPOSITION	**DISPOSAL METHOD**	**DISPOSED BY**	**DATE/TIME**

A-6003-618(01/06)

M4W41-SLF-08-763

ATTACHMENT 5

NEW GRP SDG# 20081149 SPECIFICS

Consisting of 3 pages
Including cover page

Mix, Pauline D

From: Mix, Pauline D
Sent: Monday, June 09, 2008 8:31 AM
To: Beebe, Kevin L; Frazier, Teresa A; Hudon, Carrie A; Sims, Vic T
Cc: Kopriva, Andrew; Mix, Pauline D; Dale, Troy F
Subject: FW: SDG# 20081149 - One More Change and we are good-to-go
Importance: High
Follow Up Flag: Follow up
Flag Status: Red
Attachments: 06-05-08 20081149 F08-096.pdf

Please delete the Gross Beta part of @AB-32. According to Steve this morning, they only need the Gross Alpha.
thx

Pauline D. Mix
WSCF Client Services
Phone 372-1488
Cell 947-0751
FAX 372-0456
MSIN S3-30
Pauline_D_Mix@rl.gov

From: Mix, Pauline D
Sent: Friday, June 06, 2008 12:15 PM
To: Beebe, Kevin L; Frazier, Teresa A; Hudon, Carrie A; Sims, Vic T
Cc: ^CPP Sample Management; Anastos, Heather L; Ayres, Doris E; Dale, Troy F; Kopriva, Andrew; Hampt, Heidi; Mix, Pauline D; Trechter, John E Jr; Trent, Stephen J; Widrig, Dana L
Subject: SDG# 20081149 - New Direction from GRP Client
Importance: High

Heads Up -

Per direction from Steve Trent this morning, please make the following changes

1). Change to the MeOH Blank. The MeOH Blank should match the high/low VOA compound requirements identified on the attached COC. Therefore, for sample# W08GR01504 (B1W0W3), please change the compound list from "TCL with Add Ons Acetonitrile, Hexane, Tetrahydrofuran" to the following

- Acetone
- Benzene
- Carbon tetrachloride
- Chloroform
- Methylene chloride
- Tetrachloroethene
- Toluene
- Vinyl Chloride
- Total Xylenes
- Acetonitrile

- Hexane
- Tetrahydrofuran

2). Please delete Beryllium (@GPP6010) from sample W08GR01501 (B1W0W4).

Call if you have any questions, thx

Pauline D. Mix
WSCF Client Services
Phone 372-1488
Cell 947-0751
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MSIN S3-30
Pauline_D_Mix@rl.gov

M4W41-SLF-08-763

ATTACHMENT 6

SAMPLE RECORD SHEET

Consisting of 2 pages
Including cover page

A-30 5941 1025

SAMPLE RECORD SHEET

Sample Number	Sample Suffix[1]	Empty Weight[2] (g)	Weight with Sample[3] (g)	Weight of Sample[4] (g)	Methanol Added (g)	Methanol Added (mL)	Weight of Methanol and Sample
B1W0W2 B1W0W3	K	31.1 30.7	36.8	5.7	---	---	---
	L	32.0 31.2	38.6	6.6	---	---	---
	M	32.4 31.6	38.4	6.0	---	---	---
	N	31.8 31.0	37.8	6.0	---	---	---
	P	32.0 31.3	37.0	5.0	---	---	---
B1W0W3 ~~B1W0W2~~		31.4	31.4	0	3.8	5	35.2
B1W0W2 ~~B1W0W3~~	W	31.0	37.4	5.6	4.8	5.6	42.2
	X	31.0	36.0	5.0	4.5	5.0	40.5
	Y	30.9	35.95	5.0	4.0	5.0	39.5

[1]Sample suffix of L. K. M. N and P relate to low-level concentration samples and will not have any preservation beyond freezing between -7C and -20C.
Sample suffix of W. X. and Y relate to methanol preservation for high-level samples.

[2]Empty weight is to include all labels. stickers. bags. and anything else that will be associated with the bottle when it is weighed with the sample.
[3]Ensure that everything weighed for the empty bottle and no additional items (besides the sample) is weighed
[4]Sample weight is the vial with sample minus the vial empty

6/9

Ty

Please note the typos on the VOA samples - Stan will be sending us a corrected sample record sheet - Thx -

Pauline